

Saphyr® System Installation Networking and IT Checklist

A Saphyr® site preparation call will be planned by your Bionano support team, allowing us to help you complete this checklist. To make the installation of the Saphyr System at your site a success, please consult the References section as your primary source of information. Once complete, please send back this document by email.

Company Name	Customer Name	Date	Date
Instrument Location (laboratory/service)	Installation Address	System Setup	Saphyr System.
			Compute solution
			Sales type

Customer Point of Contact

Project Leader	Name	Phone	Number	Email	Email
IT/Network	Name	Phone	Number	Email	Email

Bionano Points of Contact - Always include support@bionano.com in any existing or new conversations

FSE	Name	Phone	Number	Email	Email
GDS	Name	Phone	Number	Email	Email

Infrastructure and Networking configuration

Saphyr Instrument Controller

The Saphyr Instrument Controller will run in kiosk mode, where the user may only interface with the Saphyr Instrument Control Software (ICS). All required features, including computer administration (network configuration and system clock settings), are provided within the Saphyr ICS. Bionano Genomics policy is to not provide access to the underlying operating system to ensure the performance and security of the system are not inadvertently affected. Request for deviation from this policy may be made in the Change Request section below.

1. Has the Firewall been configured to allow the following services? - see to Saphyr Networking and setup Guide (30251)			
a.	TeamViewer utilized NOTE: customer activated. Control integrated within ICS kiosk mode	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments
b.	Saphyr Assure	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments
c.	Windows Update Service	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments
2. Will you require a proxy server to be configured?		<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments
3.	Optional: If not utilizing DHCP, please provide networking parameters IP. Address, Gateway, Netmask, DSN servers	Comments	

Bionano Access Server

The Bionano Access Server (BAS) will host the Access™ software, VIA™ software, and data generated by the Saphyr instrument and compute solution.

- A direct link between the Instrument controller and the BAS is required for data cohorts transfer purposes.
- A static IP is required for users to access the software from their workstation, and via their web browser.

Users will not have access to the Shell of the server. Bionano policy is to not provide access to the underlying operating system to ensure the performance and security of the system are not inadvertently affected. Request for deviation from this policy may be done in the Change Request section below

4. Please provide the following assigned address and DNS settings		Domain URL	DNS URL
Static IP/CIDR	IP address/CIDR	DNS 1	DNS 1
Gateway	Gateway	DNS 2	DNS 2
Notes	Any additional configuration notes (Hostname over DNS, SMTP server, NTP servers...)		

5. Has the Firewall been configured to allow the following services? - see to Saphyr Networking and Setup Guide (30251)			
a.	Remote access for Bionano Support personnel. NOTE: Required for remote updates and assistance with data analysis	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments
b.	Bionano Access (web hosted) and VIA (Client through) software accessibility from users' workstations	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments
c.	Compute Servers – depends on system configuration	<input type="checkbox"/> Yes <input type="checkbox"/> No	
d.	Compute On Demand – depends on system configuration	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments
6.	Can you provide an SSL certificate? NOTE: key.pem and certificat.pem format	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments

Compute Servers - optional (see Saphyr Networking and Setup Guide, CG-30251)			
7.	Will you allow Bionano personnel to help with racking and configuring the Compute Server(s)? NOTE: if not, Data Center personnel will be required to rack, cable, and configure the Compute Servers.	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments
8.	Is one 1 Gbps+ Switch available with enough ports for Compute servers cluster? NOTE: 1 Compute server needs 4(+1) ports.	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments
9.	Are Cat6+ network cables available for wiring the Compute servers? NOTE: 1 Saphyr Compute Server needs 4(+1) cables, 1 additional Bionano Compute Server needs 4 cables.	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments
10.	Please provide Compute cluster's head node IP and DNS settings	Domain URL	DNS URL
	Static IP/CIDR	IP address/CIDR	DNS 1 DNS 1
	Gateway	Gateway	DNS 2 DNS 2
	Notes	Any additional configuration notes (NTP servers, IDRAC...)	
11.	If cabling option B is chosen - Please provide the sequence of IP addresses for each remaining node. NOTE: for option B, each compute server needs at least 4 static IP addresses	Cluster's IP Range	

Change Request			
12.	Do you request Administrator Account(s) for Controller and Servers?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Comments
13.	Please list below any operating system settings that may be modified. Bionano will review compatibility and provide you with an agreement. NOTE: For data integrity reasons, Bionano does not recommend modifying the operating system of its servers or computers. Any unattended modification would break the warranty and support		
	Comments		
14.	Please list all software that you intend to install. Bionano will review compatibility and provide you with an agreement. NOTE: For data integrity reasons, Bionano does not recommend modifying the operating system of its servers or computers. Any unattended modification would break the warranty and support		
	Comments		

References	
Reference documents are available on our bionano.com website, or upon request	
A. Saphyr Site Preparation Guide (CG-30145)	Information related to Saphyr System setup
B. Saphyr Networking and Setup Guide (CG-30251)	Information related to IT and Networking setup
C. Data Security Guidelines (CG-30292)	Genomic data security-related document
D. Data Collection Guidelines (CG-30173)	Generated data and their weight
E. Saphyr System Installation, Laboratory Checklist (CG-30614)	Laboratory installation checklist

Additional comments
Comments

Acknowledgment		
<p>I acknowledge full responsibility for backing up generated data from the Bionano Access Server regularly.</p> <p>I have read the Instrument Controller and BAS sections in the Bionano Data Security Guidelines document and understand that modifications made to any of the operating systems or configurations may result in degradation in performance or failure of the instrument. Any failure caused by unauthorized modification will not be covered by the Saphyr warranty or service contract.</p> <p>I understand that no changes should be made before Bionano support follows up with this request.</p>	Date	Date
	Name	Name
	Title	Title
	Signature	